

Infrastructure, environment, facilities

Mr. Michael Ribordy On-Scene Coordinator **USEPA Region 5** 77 West Jackson Boulevard (SE-5J) Chicago, IL 60604-3590

Subject

Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Time-Critical Removal Action - Former Plainwell Impoundment Monthly Report (July 2008)

Dear Mike:

Attached is the 17th monthly progress report for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Time-Critical Removal Action (TCRA). This progress report is submitted in accordance with Section 19A of the February 2007 Administrative Settlement Agreement and Order on Consent (AOC) for Removal Action (Docket No. V-W-07-C-863).

If you have any questions, please do not hesitate to contact me.

Sincerely,

**ARCADIS** 

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US EPA RECORDS CENTER REGION 5

# MONTHLY REPORT FOR THE ALLIED PAPER, INC./PORTAGE CREEK/ KALAMAZOO RIVER SUPERFUND SITE TIME-CRITICAL REMOVAL ACTION – FORMER PLAINWELL IMPOUNDMENT

**REPORT #17, JULY 2008** 

# PREPARED BY ARCADIS AUGUST 15, 2008

ON BEHALF OF THE KALAMAZOO RIVER STUDY GROUP

**SUBMITTED TO** 

MICHAEL RIBORDY, ON-SCENE COORDINATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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### Significant Developments and Activities During the Period

- On July 1, the Kalamazoo River Study Group (KRSG) received copies of the analytical data for the
  polychlorinated biphenyl (PCB) soil samples collected by the United States Environmental Protection
  Agency (USEPA) in Removal Area 6B on June 4 and 5.
- On July 1, the KRSG conducted a site tour for USEPA, Michigan Department of Environmental Quality (MDEQ), Senator Patty Birkholtz, Representative Tonya Schuitmaker, and Representative Brian Calley.
- On July 1, 2, and 15, the KRSG received copies of analytical data for split samples collected by USEPA
- On July 3, 15, 25, and 31, the KRSG submitted copies of analytical data from TCRA sampling activities to USEPA.
- On July 14, USEPA notified the KRSG that USEPA would be leading the Kalamazoo Environmental Coalition on a site tour on August 28, 2008.
- On July 15, the KRSG submitted the 16<sup>th</sup> Monthly Report for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site TCRA for June 2008 to USEPA.
- On July 16, the KRSG, USEPA, MDEQ, United States Fish and Wildlife Service, Michigan Attorney General's Office, National Oceanic and Atmospheric Administration, and Michigan Department of Natural Resources (MDNR) attended the Monthly Stakeholder's Meeting in Plainwell.
- On July 17, MDNR instructed the KRSG to backfill, grade, install topsoil, and plant seed in Removal Areas 3S after it has been completely demobilized.
- On July 23, USEPA submitted to the KRSG a letter detailing additional excavation activities to be performed in Grids 4, 5, and 6 in Removal Area 6B.
- On July 30, the KRSG submitted copies of the 51<sup>st</sup> through 57<sup>th</sup> Weekly Construction Report for the Plainwell TCRA to USEPA and MDEQ.

## **Data Collected and Field Activities Conducted During the Period**

During the week of July 1, the KRSG continued excavating soil and sediment in Removal Areas 11A, 11B, 12A, and 12B; continued restoration activities in Upland Area 10B1; completed the installation of an erosion protection system in Removal Area 7B; and continued operating the water control structure (WCS). Four soil confirmation samples (TS20104 through TS20107) were collected from Removal Area 11B for PCB analysis. Two surface water samples (TS30046 and TS30047) were

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collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 12B for PCB analysis. Rinse blank (TS30048) and duplicate samples (TS30049) were also collected. One set of wastewater samples (W\_SA4N\_X\_0008) was collected from the water treatment system located at Staging Area 4N. Each set of wastewater samples consists of one influent (e.g., W\_SA4N\_Influ\_0008), two mid-point (e.g., W\_SA4N\_MidA\_0008 and W\_SA4N\_MidB\_0008), and two effluent samples (e.g., W\_SA4N\_EffluA\_0008 and W\_SA4N\_EffluB\_0008). One set of wastewater samples (W\_SA5S\_X\_0007) was collected from the water treatment system located at Staging Area 5S. One duplicate effluent sample (W\_SA5S\_Dup\_0003) was also collected. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal; solidified TSCA material was transported to the Wayne County Landfill in Belleview, Michigan for disposal.

- During the week of July 7, the KRSG continued excavating soil and sediment in Removal Areas 11B and 12B; continued excavating floodplain soils in Removal Areas 11A, 12A, and 13A; continued restoration activities in Upland Area 10B1 and Removal Area 12B; and continued operating the WCS. Twenty soil confirmation samples (TS20108, and TS20110 through TS20128) were collected from Removal Areas 11A and 12B for PCB analysis. One duplicate sample (TS20109) was also collected. The USEPA collected a split sample of TS20110 (APS-070908-32-SD/TS20110) and TS20115 (APS-070908-33-SD/TS20115), Two surface water samples (TS30050 and TS30051) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 11A for PCB analysis. A rinse blank (TS30052) was also collected. The USEPA collected a split sample of TS30050 (APS-071008-03-WT/TS30050). One set of wastewater samples (W SA4N X 0009) was collected from the water treatment system located at Staging Area 4N. One duplicate effluent sample (W SA4N Dup 0003) was also collected. Two sets of wastewater samples (W SA5S X 0008 and W SA5S X 0009) were collected from the water treatment system located at Staging Area 5S. Two duplicate effluent samples (W\_SA5S\_Dup\_0002 and W\_SA5S\_Dup\_0004) were also collected. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal; solidified TSCA material was transported to the Wayne County Landfill in Belleview, Michigan for disposal.
- During the week of July 14, the KRSG continued excavating soil and sediment in Removal Areas 11A and 12A; began demobilizing Staging Area 3S; continued restoration activities in Removal Areas 8, 9A, 9B, 11B, and 12B; and continued operating the WCS. Two soil confirmation samples (TS20129 and TS20131) were collected from Removal Area 11A for PCB analysis. A duplicate sample TS20130) was also collected. Two surface water samples (TS30053 and TS30054) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 12A for PCB analysis. Two sets of wastewater samples (W\_SA4N\_X\_0010 and W\_SA4N\_X\_0011) were collected from the water treatment system located at Staging Area 4N. Two duplicate samples (W\_SA4N\_Dup\_0005 and W\_SA4N\_Dup\_0006) were also collected. One set of wastewater samples (W\_SA5S\_X\_0010) was collected from the water treatment system located at Staging Area 5S. One

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duplicate effluent sample (W\_SA5S\_Dup\_0005) was also collected. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal; solidified TSCA material was transported to the Wayne County Landfill in Belleview, Michigan for disposal.

- During the week of July 21, the KRSG continued excavating soil and sediment in Removal Areas 11A and 12A; removed additional material from Grids 4, 5, and 6 of Removal Area 6B at the direction of USEPA; continued demobilizing Staging Area 3S; continued restoration activities in Removal Areas 6B, 10B, 12B, and Upland Area 10B1; began installing the Phase 2 Cofferdam; and added two rows of stop logs to the WCS to raise the water level to aid in installation of the Phase 2 Cofferdam. Four soil confirmation samples (TS20132 through TS20135) were collected from Removal Area 11A for PCB analysis. Two surface water samples (TS30055 and TS30056) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 12A for PCB analysis. A rinse blank (TS30057) was also collected. Two sets of wastewater samples (W\_SA4N\_X\_0012 and W\_SA4N\_X\_0013) were collected from the water treatment system located at Staging Area 4N. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal; solidified TSCA material was transported to the Wayne County Landfill in Belleview, Michigan for disposal.
- During the week of July 28, the KRSG continued excavating soil and sediment in Removal Area 12A and Mid-Channel Area B; continued demobilizing Staging Area 3S; continued restoration activities in Removal Areas 10B and 11B; continued installing the Phase 2 Cofferdam; and continued operating the WCS Six soil confirmation samples (TS20136 through TS20141) were collected from Removal Areas 11A and 12A for PCB analysis. Two surface water samples (TS30058 and TS30059) were collected from locations 300 feet downstream and 200 feet upstream, respectively, of Removal Area 12A for PCB analysis. A rinse blank (TS30060) was also collected. Table A summarizes the samples collected. Solidified non-TSCA material from the staging areas was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan for disposal.
- As of July 31, approximately 80,000 cubic yards of material had been excavated from Removal Areas 1, 2A and 2B, 3A and 3B, 4A and 4B, 5, 6A and 6B, 7, 8, 9A, 9B, 10A, 10B, 11A, 11B, 12A, 12B, 13A, 13B, Mid-Channel Area B, Mid-Channel Area C, the Phase 1 Cofferdam Area, Upland Areas 3A1, 3A2, 4A1, 6B1, 10B1, 11A1, and 12A1, and Islands 1, 2 and 3.

### **Laboratory Data Received During the Period**

 During the week of July 1, the KRSG received analytical data for soil confirmation samples TS20104 through TS20107 and surface water samples TS30040 though TS30042 (collected in June).

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- During the week of July 7, the KRSG received analytical data for soil confirmation samples TS20108 through TS20120, wastewater sample sets W\_SA4N\_X\_0008, W\_SA4N\_X\_0009, W\_SA5S\_X\_0007 through W\_SA5S\_X\_0009, and duplicate wastewater effluent samples W\_SA4N\_Dup\_0003 and W\_SA5S\_Dup\_0002 through W\_SA5S\_Dup\_0004.
- During the week of July 14, the KRSG received analytical data for soil confirmation samples TS20121 through TS20131, USEPA split samples APS-070908-32-SD/TS20110, APS-070908-33-SD/TS20115, and APS-071008-03-WT/TS30050, surface water samples TS30043 through TS30045 (collected in June), wastewater sample set W\_SA4N\_X\_0010, and duplicate wastewater effluent sample W\_SA4N\_Dup\_0005.
- During the week of July 21, the KRSG received analytical data for soil confirmation samples TS20132 through TS20135, surface water samples TS30046 through TS30048, wastewater sample sets W\_SA4N\_X\_0011 through W\_SA4N\_X\_0013, W\_SA5S\_X\_0010, and duplicate wastewater effluent samples W\_SA4N\_Dup\_0006 and W\_SA5S\_Dup\_0005.
- During the week of July 28, the KRSG received analytical data for soil confirmation samples TS20136 through TS20141 and surface water samples TS30050 through TS30052.
- The KRSG is awaiting analytical results for surface water samples TS30053 through TS30060.

### **Issues Encountered and Actions Taken**

- On June 4 and 5, USEPA collected soil samples from five of the eight soil confirmation sampling grids
  located in Removal Area 6B. On July 23, USEPA directed the KRSG to excavate an additional 2 to 12
  inches of material from Grids 4, 5, and 6. This material was excavated on July 24 under the
  supervision of USEPA and MDEQ. Following the excavation, both agencies verbally approved
  completion of removal activities in Removal Area 6B.
- On July 1, kayakers were spotted near Removal Area 7. Site personnel helped the boaters out of the water and launched them downstream near Otsego.
- A 50-foot long area downstream of Removal Area 12B was excavated because visible gray material
  was observed in this area. This area was not included in the original design because it was believed
  to be inaccessible; however, based on current field conditions, the area was an accessible flat bench.
  USEPA verbally approved this design change on July 9.
- A PCB concentration of 17 milligram per kilogram (mg/kg) was detected in soil sample TS20117, collected from Removal Area 11A, Grid 5 (bank sample) on July 9. This concentration exceeded the cleanup standard of 5 mg/kg. An additional 6 inches of material was excavated, and the area was sampled again on July 11 (TS20126). A PCB concentration of 2.8 mg/kg was detected in the second sample, so no additional excavation was warranted.

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- A PCB concentration of 11 mg/kg was detected in soil sample TS20128, collected from Removal Area 11A, Grid 5 (TSCA) on July 11. An additional 6 inches of material was excavated on July 18, and the area was resampled (TS20134) on July 21. A PCB concentration of 9.5 mg/kg was detected in the second sample, so an additional 6 inches of material was removed on July 24. The area was resampled (TS20135) on July 24. A PCB concentration of 14 mg/kg was detected in the third sample collected from that area. An additional 6 inches of material will be excavated after the sheetpile from Mid-Channel Area B is removed during the week of August 4; the area will be resampled after this removal.
- PCB concentrations of 7.6 and 7.2 mg/kg were detected in soil sample TS20129 and its duplicate TS20130, collected from Removal Area 11A, Grid 6 (bank sample) on July 16. An additional 6 inches of material was excavated on July 18, and the area was resampled on July 21 (TS20133). A PCB concentration of 15 mg/kg was detected in the second sample collected from this area. An additional 6 inches of material will be excavated after the sheetpile from Mid-Channel Area B is removed during the week of August 4; the area will be resampled after this removal.
- A PCB concentration of 13 mg/kg was detected in soil sample TS20141, collected from Removal Area 11A, Grid 8 (bank sample) on July 31. An additional 6 inches of material will be excavated after the sheetpile from Mid-Channel Area B is removed during the week of August 4; the area will be resampled after this removal.
- Analytical results for surface water samples TS30040 through TS30042 were received on July 2. The downstream sample (TS30040) showed a PCB concentration of 0.51 micrograms per liter (µg/L). The sample was collected at 0900. At 0945, excavation activities in Removal Area 12B were suspended due to a visible silt plume originating from the work area. Work was immediately suspended so the curtain could be repaired; work resumed later that same day. Turbidity readings for the day were within acceptable limits. Field personnel will inspect the turbidity curtain before collecting a surface water sample in the future.
- Low concentrations of PCBs were detected in surface water samples TS30041 (collected on June 19), TS30043 (collected on June 26), and TS30050 (collected on July 10), which were collected from 200 feet upstream of Removal Area 12B and 300 feet downstream of Removal Areas 12B and 11A, respectively. No elevated turbidity readings were recorded on any of these days or throughout the removal activities in these areas.

### **Developments Anticipated During the Next Reporting Period**

 During the week of August 1, the KRSG is scheduled to continue excavating soil and sediment in Removal Area 12A and Mid-Channel Area B; demobilizing Staging Area 3S; restoring Removal Areas 10B and 11B; installing the Phase 2 Cofferdam; operating the WCS; and loading and transporting solidified material to the appropriate landfill.

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- During the week of August 4, the KRSG is scheduled to continue excavation activities in Removal Areas 11A and 12A; remove resuspension controls from the Mid-Channel Area B; operate the WCS; complete the Phase 2 Cofferdam; complete the restoration of Staging Area 3S; and continue loading and transporting solidified material to the appropriate landfill.
- During the week of August 11, the KRSG is scheduled to continue excavation activities in Removal Areas 11A, 12A, and 13A; install resuspension controls in Mid-Channel Area A; operate the WCS; and continue loading and transporting solidified material to the appropriate landfill.
- During the week of August 18, the KRSG is scheduled to continue excavation activities in Removal Areas 12A, 13A and Mid-Channel Area A; operate the WCS; and continue loading and transporting solidified material to the appropriate landfill.
- During the week of August 25, the KRSG is scheduled to continue excavation activities in Removal Areas 12A, 13A and Mid-Channel Area A; operate the WCS; and continue loading and transporting solidified material to the appropriate landfill.
- The KRSG will continue to submit the Weekly Construction Report for the Plainwell TCRA to USEPA and MDEQ in August.
- The KRSG will continue to submit copies of analytical data from TCRA sampling activities to USEPA in August.
- Throughout August, the KRSG will, as necessary, continue to submit Subcontractor Qualification
   Notifications to USEPA, as required by Paragraph 11 of the TCRA AOC.

### Table A — Summary of Samples Collected and Data Received in July 2008

Sample ID	Sample Date	Data Received	Sample Delivery Group	Laboratory	Sample Location	Analysis. Conducted	PCB Result	PCB Action	Response Action
. N	uli	74 747	ANTES	i ilila	Soil Confirmation Samples	shittig 1.5		. <sup>2</sup> 0 <sub>4</sub> .	All I. In Man
TS20104			I	]	RA 11B, Grid 2	PCBs	< 0 33 mg/kg	5 mg/kg	None
TS20105	07/01/08	07/02/08	082619	KAR Labs	RA 11B, Grid 3	PCBs	< 0 33 mg/kg	5 mg/kg	None
TS20106	1				RA 11B, Grid 4	PCBs	1 2 mg/kg	5 mg/kg	None
TS20107	07/02/08	07/03/08	082641	KAR Labs	RA 11B, Grid 5	PCBs	< 0 33 mg/kg	5 mg/kg	None
TS20108					DA 12D Cod 1	DCD-	< 0 33 mg/kg	5 mg/kg	None
[TS20109]		07/10/08	082734	KAR Labs	RA 12B, Grid 1	PCBs	[< 0 33 mg/kg]	[5 mg/kg]	[None]
TS20110 <sup>1</sup>	7			Ī	RA 12B, Grid 2	PCBs	1 6 mg/kg	5 mg/kg	None
APS-070908-32- SD/TS20110	1	07/15/08	0807143	TriMatrix Laboratories	RA 12B, Grid 2	PCBs	1.5 mg/kg	5 mg/kg	None
TS20111	7			KAR Labs	RA 12B, Grid 3	PCBs	< 0 33 mg/kg	5 mg/kg	None
TS20112	7 .		}		RA 12B, Grid 4	PCBs	3 5 mg/kg	5 mg/kg	None
TS20113	07/09/08	07/10/08	082734		RA 12B, Grid 5	PCBs	2 9 mg/kg	5 mg/kg	None
TS20114	7				RA 12B, Grid 6	PCBs	1 5 mg/kg	5 mg/kg	None
TS20115 1	7.				RA 11A, Grid 3 (BS)	PCBs	0 41 mg/kg	5 mg/kg	None
APS-070908-33- SD/TS20115		07/15/08	0807143	TriMatrix Laboratories	RA 11A, Grid 3 (BS)	PCBs	0.78 mg/kg	5 mg/kg	None
TS20116	1			<u> </u>	RA 11A, Grid 4 (BS)	PCBs	< 0 33 mg/kg	5 mg/kg	None
TS20117		07/10/08	082734	KAR Labs	RA 11A, Grid 5 (BS)	PCBs	17 mg/kg	5 mg/kg	Excavate an additional 6" of material and resample (TS20126)
TS20118					RA 12B, Grid 7	PCBs	1 4 mg/kg	5 mg/kg	None
TS20119	07/10/08	07/11/08	082757	KAR Labs	RA 12B, Grid 8	PCBs	1 1 mg/kg	5 mg/kg	None
TS20120				<u> </u>	RA 12B, Grid 9	PCBs	1.1 mg/kg	5 mg/kg	None
TS20121					RA 11A, Grid 3'(TSCA)	PCBs	< 0 33 mg/kg	5 mg/kg	None
TS20122					RA 11A, Grid 3	PCBs	< 0 33 mg/kg	5 mg/kg	None
TS20123					RA 11A, Grid 4 (TSCA)	PCBs	1 3 mg/kg	5 mg/kg	None
TS20124		· I		1 L	RA 11A, Grid 4	PCBs	< 0 33 mg/kg	5 mg/kg	None
TS 20125	07/11/08	07/14/08	082787	KAR Labs	RA 11A, Grid 2	PCBs	< 0 33 mg/kg	5 mg/kg	None
TS20126				i	RA 11A, Grid 5 (BS)	PCBs	2 5 mg/kg	5 mg/kg	None None
TS20127	_			1	RA 11A, Grid 5	PCBs	< 0 33 mg/kg	5 mg/kg	None
TS20128					RA 11A, Grid 5 (TSCA)	PCBs	11 mg/kg	5 mg/kg	Excavate an additional 6" of material and resample (TS20134)
TS20129		_			RA 11A, Grid 6	PCBs	7 6 mg/kg	5 mg/kg	Excavate an additional 6" of material
[TS20130]	07/16/08	07/17/08	082850	850 KAR Labs			7.2 mg/kg	5 mg/kg	and resample (TS20133)
TS20131					RA 11A, Grid 7	PCBs	4 5 mg/kg	5 mg/kg	None

## Table A — Summary of Samples Collected and Data Received in July 2008

Sample ID	Sample Date	Data Received	Sample Delivery Group	Laboratory	Sample Location	Analysis Conducted	PCB Result	PCB Action	Response Action
					Confirmation Samples (contin			<u> </u>	
TS20132					RA 11A, Grid 2 (BS)	PCBs	3 4 mg/kg	5 mg/kg	None
TS20133	07/21/08	07/22/08	082895	KAR Labs	RA 11A, Grid 6 (BS)	PCBs	15 mg/kg	5 mg/kg	Excavate an additional 6" of material after the sheetpile for Mid-Channel Area B is removed
TS20134					RA 11A, Grid 5 (TSCA)	PCBs	9 5 mg/kg	5 mg/kg	Excavate an additional 6" of material and resample (TS20135)
TS20135	07/24/08	07/23/08	082949	KAR Labs	RA 11A, Grid 5 (TSCA)	PCBs	14 mg/kg	5 mg/kg	Excavate an additional 6" of material after the sheetpile for Mid-Channel Area B is removed
TS20136	1				RA 12A, Grid 1 (BS)	PCBs	0 58 mg/kg	5 mg/kg	None
TS20137	J				RA 12A, Grid 2 (BS)	PCBs	0 58 mg/kg	5 mg/kg	None
TS20138	<b>.</b>		1	KAR Labs	RA 12A, Grid 3 (BS)	PCBs	3 0 mg/kg	5 mg/kg	None
TS20139	07/31/08	08/01/08	083088		RA 12A, Grid 4 (BS)	PCBs	2 4 mg/kg	5 mg/kg	None
TS20140	] 07/31/08				RA 12A, Grid 5 (BS)	PCBs	1 8 mg/kg	5 mg/kg	None
TS20141					RA 11A, Grid 8 (BS)	PCBs	13 mg/kg	5 mg/kg	Excavate an additional 6" of material after the sheetpile for Mid-Channel Area B is removed
in the	per la	ny ya oset uline	Table:	Å1	Surface Water Samples		1763-		z ing. udd zirin
TS30040	_		TCRA		300' downstream RA 12B	PCBs	0 51 mg/L	-	None
TS30041	06/19/08	07/02/08	D8 55 SDSP		200' upstream RA 12B	PCBs	0 059 mg/L J	-	None
TS30042	ļ.,,				Rinse Blank	PCBs	<0 058 mg/L	-	None
TS30043	1	07/14/08	TCRA	TAL	300' downstream RA 12B	PCBs	0 033 mg/L J	-	None
TS30044	06/26/08		57_SDSP		200' upstream RA 12B	PCBs	< 0 056 mg/L	<u> </u>	None
TS30045					Rinse Blank	PCBs	< 0 052 mg/L		None
TS30046	4			i L	300' downstream RA 12B	PCBs	< 0 058 mg/L	-	None
TS30047	07/02/08	07/24/08	TCRA	TAL	200' upstream RA 12B	PCBs	< 0 056 mg/L	<del></del>	None
[TS30049]	1 01/70200	01721700	59_SDSP	'^- [	<u> </u>	[PCBs]	[< 0 056 mg/L]	[-]	[None]
TS30048	ļ				Rinse Blank	PCBs	< 0 048 mg/L	-	None
T\$30050 <sup>1</sup>		07/31/08	TCRA 61_SDSP	TAL	300' downstream RA 11A	PCBs	0 024 mg/L J	-	None
APS-071008-03- WT/TS30050	07/10/08	07/15/08	0807143	TriMatrix Laboratories	300' downstream RA 11A	PCBs	< 0.020 mg/L	•	None
TS30051	]	07/31/08	TCRA	TAL	200' upstream RA 11A	PCBs	< 0 048 mg/L	-	None
TS30052		0//3//06	61_SDSP	I AL	Rinse Blank	PCBs	< 0 051 mg/L	-	None
TS30053	07/17/08	NR	NR	TAL	300' downstream RA 12A	PCBs	-	•	-
TS30054	37717708	INIX	INIX	'AL	200' upstream RA 12A	PCBs		-	-
T\$30055					300' downstream RA 12A	PCBs		•	-
TS30056	07/24/08	NR	NR	TAL	200' upstream RA 12A	PCBs	-	-	-
T\$30057					Rinse Blank	PCBs		-	

### Table A — Summary of Samples Collected and Data Received in July 2008

Sample ID	Sample Date	Data Received	Sample Delivery Group	Laboratory	Sample Location	Analysis Conducted	PCB Result	PCB Action	Response Action
R. Y.	Pr	348°		k .	Surface Water Samples (contin	ued)	entry, a	in the	and the state of t
T\$30058					300' downstream RA 12A	PCBs	-		-
TS30059	07/31/08	NR	NR	TAL	200' upstream RA 12A	PCBs	-	-	-
TS30060				_	Rinse Blank	PCBs	<u>-</u>	-	-
Ser swifter	12	. Villena		34	Wastewater Samples	<u> </u>			· · · · · · · · · · · · · · · · · · ·
W_SA4N_Influ_0008			}		Staging Area 4N, Discharge 8, influent sample	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = 13 mg/L, No Action Limit
W_SA4N_MidA_0008					Staging Area 4N, Discharge 8, midpoint sample, right side	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_EffluA_0008	07/03/08	07/07/08	082663	KAR Labs	Staging Area 4N, Discharge 8, effluent sample, right side	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 μg/L	None TSS = <4 mg/L, Action Limit ≈ 45 mg/L
W_SA4N_MidB_0008					Staging Area 4N, Discharge 8, midpoint sample, left side	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_EffluB_0008					Staging Area 4N, Discharge 8, effluent sample, left side	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA4N_Influ_0009					Staging Area 4N, Discharge 9, influent sample	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = 8 mg/L, No Action Limit
W_SA4N_MidA_0009			082759	KAR Labs	Staging Area 4N, Discharge 9, midpoint sample, right side	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_EffluA_0009	07/10/08	07/11/08			emuent sample, right side	PCBs, TSS, P	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L, P=0 13 mg/L, No Action Limit
[W_SA4N_Dup_0003]	] 07710708	0771700				. 550, 760, 1	[< 0 1 µg/L]	[Monthly Average of 2 6 x 10-5 µg/L]	[None TSS = <4 mg/L, Action Limit = 45 mg/L, P=0 13 mg/L, No Action Limit]
W_SA4N_MidB_0009					Staging Area 4N, Discharge 9, midpoint sample, left side	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_EffluB_0009					Staging Area 4N, Discharge 9, effluent sample, left side	PCBs, TSS, P	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 μg/L	None TSS = <4 mg/L, Action Limit ≈ 45 mg/L, P=0 06 mg/L, No Action Limit
W_SA4N_Influ_0010					Staging Area 4N, Discharge 10, influent sample	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_MidA_0010				KAR Labs	Staging Area 4N, Discharge 10, midpoint sample, right side	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_EffluA_0010	07/14/08	7/14/08 07/15/08	082804		Staging Area 4N, Discharge 10, effluent sample, right side	PCBs, TSS	< 0.1 µg/L	Monthly Average of 2 6 x 10-5 μg/L	None TSS = <4 mg/L, Action Limit ≈ 45 mg/L
W_SA4N_MidB_0010	37714700	31710/00	002004	10111 2000	Staging Area 4N, Discharge 10, midpoint sample, left side	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_EffluB_0010					Staging Area 4N, Discharge 10,	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 μg/L	None TSS = <4 mg/L, Action Limit ≈ 45 mg/L
[W_SA4N_Dup_0005]					effluent sample, left side	. 555, 156	[< 0 1 µg/L]	[Monthly Average of 2 6 x 10-5 µg/L]	[None TSS = <4 mg/L, Action Limit = 45 mg/L]

### Table A — Summary of Samples Collected and Data Received in July 2008

Sample ID	Sample Date	Data Received	Sample Delivery Group	Laboratory	Sample Location	Analysis Conducted	PCB Result	PCB Action Limit	Response Action
्य देशक	· "Tuta	196	' stable:	'n	Wastewater Samples (continue	ed)	(A) The same		is Singley.
W_SA4N_Influ_0011					Staging Area 4N, Discharge 11, influent sample	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = 22 mg/L, No Action Limit
W_SA4N_MidA_0011					Staging Area 4N, Discharge 11, midpoint sample, right side	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_EffluA_0011	07/18/08	07/21/08	082887	KAR Labs	Staging Area 4N, Discharge 11,	PCBs, TSS	< 0 1 μg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
[W_SA4N_Dup_0006]	] 07/10/00	07721700	002007	IVAIN Labs	effluent sample, right side	1 003, 100	[< 0 1 µg/L]	[Monthly Average of 2 6 x 10-5 µg/L]	[None TSS = <4 mg/L, Action Limit = 45 mg/L]
W_SA4N_MidB_0011					Staging Area 4N, Discharge 11, midpoint sample, left side	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_EffluB_0011					Staging Area 4N, Discharge 11, effluent sample, left side	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA4N_Influ_0012				82294 KAR Labs	Staging Area 4N, Discharge 12, influent sample	PCBs, TSS	0 1 μg/L	No Action Limit	None TSS = 14 mg/L, No Action Limit
W_SA4N_MidA_0012		07/23/08			Staging Area 4N, Discharge 12, midpoint sample, right side	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_EffluA_0012	07/22/08		082294		Staging Area 4N, Discharge 12, effluent sample, right side	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA4N_MidB_0012	]		]		Staging Area 4N, Discharge 12, midpoint sample, left side	PCBs, TSS	< 0.1 μg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_EffluB_0012					Staging Area 4N, Discharge 12, effluent sample, left side	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA4N_Influ_0013					Staging Area 4N, Discharge 13, influent sample	PCBs, TSS	0 1 μg/L	No Action Limit	None TSS = 10 mg/L, No Action Limit
W_SA4N_MidA_0013	07/23/08			KAR Labs	Staging Area 4N, Discharge 13, midpoint sample, right side	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_EffluA_0013		08 07/25/08	082950		Staging Area 4N, Discharge 13, effluent sample, right side	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA4N_MidB_0013					Staging Area 4N, Discharge 13, midpoint sample, left side	PCBs, TSS	< 0 1 µg/L	No Action Limit	None TSS = < 4 mg/L, No Action Limit
W_SA4N_EffluB_0013					Staging Area 4N, Discharge 13, effluent sample, left side	PCBs, TSS	< 0 1 μg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L

### Table A — Summary of Samples Collected and Data Received in July 2008

Sample ID	Sample Date	Data Received	Sample Delivery Group	Laboratory	Sample Location	Analysis Conducted	PCB Result	PCB Action	Response Action
12.	Jan.		App. Spring	essa: simi	Wastewater Samples (continue	ed) 🧀	de Alexanors	Total Control Control Control	
W_SA5S_Influ_0007	07/03/08				Staging Area 5S, Discharge 7, influent sample	PCBs	< 0 1 µg/L	No Action Limit	-
W_SA5S_MidA_0007					Staging Area 5S, Discharge 7, midpoint sample, right side	PCBs	< 0.1 µg/L	No Action Limit	-
W_SA5S_EffluA_0007		07/07/08	082663	KAR Labs	Staging Area 5S, Discharge 7,	PCBs, TSS	< 0.1 µg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = 7 mg/L, Action Limit = 45 mg/L
[W_SA5S_Dup_0003]	07703708	07/07/08	082003	CAN Labs	effluent sample, right side	[PCBs, TSS]	[< 0.1 µg/L]	[Monthly Average of 2 6 x 10-5 µg/L]	[None TSS = 7 mg/L, Action Limit = 45 mg/L]
W_SA5S_MidB_0007			j		Staging Area 5S, Discharge 7, midpoint sample, left side	PCBs	< 0 1 µg/L	No Action Limit	-
W_SA5S_EffluB_0007					Staging Area 5S, Discharge 7, effluent sample, left side	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 μg/L	None TSS = 4 mg/L, Action Limit = 45 mg/L
W_SA5S_Influ_0008		07/09/08		KAR Labs	Staging Area 5S, Discharge 8, influent sample	PCBs	< 0.1 µg/L	No Action Limit	-
W_SA5S_MidA_0008	]		082694		Staging Area 5S, Discharge 8, midpoint sample, right side	PCBs	< 0.1 µg/L	No Action Limit	-
W_SA5S_EffluA_0008	07/08/08				Staging Area 5S, Discharge 8, effluent sample, right side	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L; P=0 36 mg/L, No Action Limit
[W_SA5S_Dup_0002]	07/06/06					[PCBs, TSS]	[< 0 1 µg/L]	[Monthly Average of 2 6 x 10-5 µg/L]	[None TSS = <4 mg/L, Action Limit = 45 mg/L, P=0 36 mg/L, No Action Limit]
W_SA5S_MidB_0008					Staging Area 5S, Discharge 8, midpoint sample, left side	PCBs	< 0 1 µg/L	No Action Limit	-
W_SA5S_EffluB_0008					Staging Area 5S, Discharge 8, effluent sample, left side	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L, P=0 13 mg/L, No Action Limit
W_SA5S_Influ_0009					Staging Area 5S, Discharge 9, influent sample	PCBs	< 0 1 µg/L	No Action Limit	-
W_SA5S_MidA_0009	) 				Staging Area 5S, Discharge 9, midpoint sample, right side	PCBs	< 0 1 μg/L	No Action Limit	-
W_SA5S_EffluA_0009	07/09/08	07/10/08	082734	KAR Labs	Staging Area 5S, Discharge 9, effluent sample, right side	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA5S_MidB_0009					Staging Area 5S, Discharge 9, midpoint sample, left side	PCBs	< 0 1 µg/L	No Action Limit	-
W_SA5S_EffluB_0009					Staging Area 5S, Discharge 9,	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L\
[W_SA5S_Dup_0004]		_			effluent sample, left side	[PCBs, TSS]	[< 0 1 µg/L]	[Monthly Average of 2 6 x 10-5 µg/L]	[None TSS = <4 mg/L, Action Limit = 45 mg/L]

#### Table A — Summary of Samples Collected and Data Received in July 2008

Sample ID	Sample Date	Data Received	Sample Delivery Group	Laboratory	Sample Location	Analysis Conducted	PCB Result	PCB Action Limit	Response Action
odi no rec		สยั้นธ.		λ.	Wastewater Samples (continue	od)	iyir Anda	dun -	
W_SA5S_Influ_0010		·		KAR Labs	Staging Area 5S, Discharge 10, influent sample	PCBs	< 0 1 µg/L	No Action Limit	•
W_SA5S_MidA_0010		3 07/22/08	08 082896		Staging Area 5S, Discharge 10, midpoint sample, right side	PCBs	< 0 1 µg/L	No Action Limit	-
W_SA5S_EffluA_0010	07/19/08				Staging Area 5S, Discharge 10, effluent sample, right side	PCBs, TSS	< 0 1 µg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L
[W_SA5S_Dup_0005] ·						[PCBs, TSS]	[< 0 1 µg/L]	[Monthly Average of 2 6 x 10-5 µg/L]	[None. TSS = <4 mg/L, Action Limit = 45 mg/L]
W_SA5S_MidB_0010					Staging Area 5S, Discharge 10, midpoint sample, left side	PCBs	< 0 1 µg/L	No Action Limit	-
W_SA5S_EffluB_0010					Staging Area 5S, Discharge 10, effluent sample, left side	PCBs, TSS	< 0 1 μg/L	Monthly Average of 2 6 x 10-5 µg/L	None TSS = <4 mg/L, Action Limit = 45 mg/L

#### Notes:

- 1 Split sample collected by USEPA
- J The compound was positively identified, however, the associated numerical value is an estimated concentration only
- \* USEPA split samples are shown in bold and italicized font
- \* Duplicate samples are shown in brackets
- \* Analytical results have not been validated

BS - bank sample TSCA - Sample collected from portion of sampling grid with PCB concentrations greater than 50 mg/kg prior to excavation

NR - not received TSS - Total Suspended Solids

P - Phosphorus UA - Upland Area

PCBs - Polychlorinated Biphenyls cm² - square centimeters

RA - Removal Area mg/kg - milligrams per kilogram

TAL - TestAmerica Laboratories mg/L - milligrams per liter

μg/L - micrograms per liter